malignancies has won an indisputable place as a palliative measure in breast malignancies.

### CARCINOMA OF THE UTERUS

Carcinoma of the cervix uteri has been treated in England, France, the Scandinavian countries and in the United States almost entirely by irradiation for the past few years. Voluminous statistics have shown its superiority over the surgical operation, with its attendant high mortality.

There has been steady and gradual progress in the field of radiation therapy—apparatus has improved and, most important of all, knowledge has increased. This latter fact has undoubtedly been the greatest incentive to progress. Those of us who are using roentgen-ray apparatus at a voltage of a half-million or more have noticed a far greater improvement in the primary regression in cervical carcinoma patients than was seen when we were treating with two hundred thousand volts. However, as other treatment factors of time, filtration, fractionation of dosage and total dosage have also been changed, it is not logical to attribute this improvement wholly to the increase in voltage, but probably to the more adequate irradiation which the pelvis has received. Radium is still used in conjunction with the external roentgen ray in the treatment of all cases of cancer of the cervix.

Early carcinoma of the fundus has yielded good results in the past from surgery. Results of cases treated by irradiation alone closely approximate those of surgery. A combination treatment of preoperative intra-uterine radium and postoperative roentgen ray, with surgery, shows better results than either method when used alone.

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## POSTERIOR VAGINAL HERNIA*

*By* RAY B. McCARTY, M.D.
*Riverside*

DISCUSSION *by William P. Kroger, M. D., Los Angeles; Bon O. Adams, M. D., Riverside; Hall G. Holder, M. D., San Diego.*

POSTERIOR vaginal hernia is an oddity which is usually easy to recognize if one is aware of its possibility. It consists of a peritoneal sac, with abdominal contents, which has pushed its way through the cul-de-sac, presenting itself in the vagina. Its surgical repair is generally successful; however, many of the cases reported had repeatedly been mistaken for high rectoceles, with resultant failure in repair before the true nature of the condition was recognized.

### CLASSIFICATION

Posterior vaginal hernia falls into Miles's[9] classification of pelvic hernia, which is a general term embracing all herniae with a peritoneal sac going through the pelvic floor. These pelvic herniae are further subdivided according to their point of appearance; *i. e.*, vaginal hernia in the vagina, perineal hernia in the perineum, and pudendal hernia in the labia. The vaginal herniae are further subdivided into anterior and posterior, according to the point of exit of the sac in relation to the uterus. Miles does not group postoperative vaginal herniae separately but, as Masson and Simon[8] point out, "they form a distinct type and should be included as a third subdivision in this classification."

Cystocele and rectocele are not included in the classification, since a peritoneal sac is not present. Furthermore, Miles[9] does not include prolapsus of the uterus accompanied by a large bulging cul-de-sac in his classification. He states that this condition is due to a descent of the floor of the pelvis and presents "no true hernial sac, and no ring or aperture through which the viscera herniate." He describes this condition as elytrocele or vaginal enterocele.

### LITERATURE

But few cases of vaginal hernia have been reported in the literature. According to Barker,[1] the first case recorded was published in the early part of the eighteenth century by Garengeot. In 1804, Sir Astley Cooper[4] included an illustration of a case in his classic work on hernia. Bueermann,[3] in 1932, found eighty-six cases of vaginal hernia recorded in the literature, some of which were found with incomplete data or only by title. Of this number, Bueermann was able to evaluate the data on seventy-six cases and of this number, fifty-six, or 73.8 per cent, were found to be of the posterior vaginal type, whereas fifteen, or 19.7 per cent, were of the anterior type. No indication as to the location of the hernia was found in 6.5 per cent of the cases. Since that time Black[2] and Williamson (quoted by Black) have each reported one case, while Dew[5] and Stearns[10] have each reported two cases. These make a total of sixty-two cases of reported posterior vaginal hernia.

Through the courtesy of Dr. Bon O. Adams, in whose service the following case was operated by Doctor Adams and myself at the Riverside Community Hospital, I will add to the sixty-two cases previously reported, the sixty-third, as follows:

### REPORT OF CASE

Mrs. L. R. H. Age, forty.

*Chief Complaint.*—Protrusion from the vagina, associated with a bearing-down feeling in the pelvis when on her feet.

*Family History.*—The family history is negative. Menstrual periods regular; twenty-eight-day type and of six days' duration. Moderate menorrhagia for the past three years. No menstrual pain. Always has had moderate leukorrhea.

Two children living and well, eleven and three years of age. The first delivery, eleven years ago, was by forceps. Ten years ago, a stillbirth occurred at term. This was also a forceps' delivery, and the child weighed thirteen and one-half pounds. Nine years ago a trachelorrhaphy, perineorrhaphy, a Baldy-Webster suspension, and left oöphorectomy were performed. The left ovary was removed because of a simple cyst (7 by 5 centimeters). Three years ago cesarean section was performed two weeks before the expected term of pregnancy.

*Present History.*—Shortly after the cesarean section the patient felt as if something were "dropping down in the vagina," only when on her feet. In the past year and a half this had been associated with a protrusion from the vagina "the size of a fist," and a bearing-down feeling in the pelvis after being on her feet throughout the day.

* Read before the General Surgery Section of the California Medical Association at the sixty-sixth annual session, Del Monte, May 2–6, 1937.

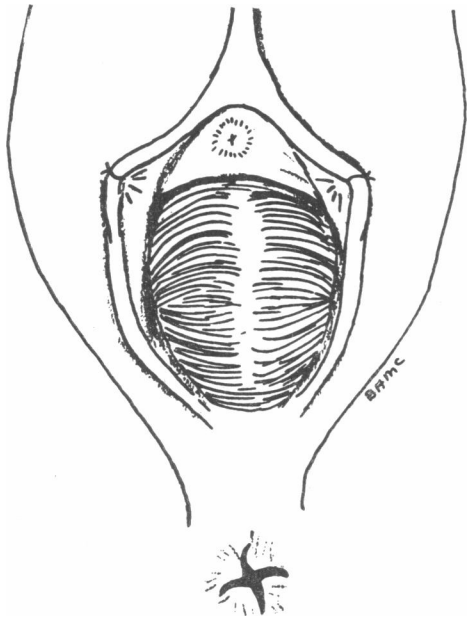

Fig. 1.—Posterior vaginal hernia presenting at vaginal orifice

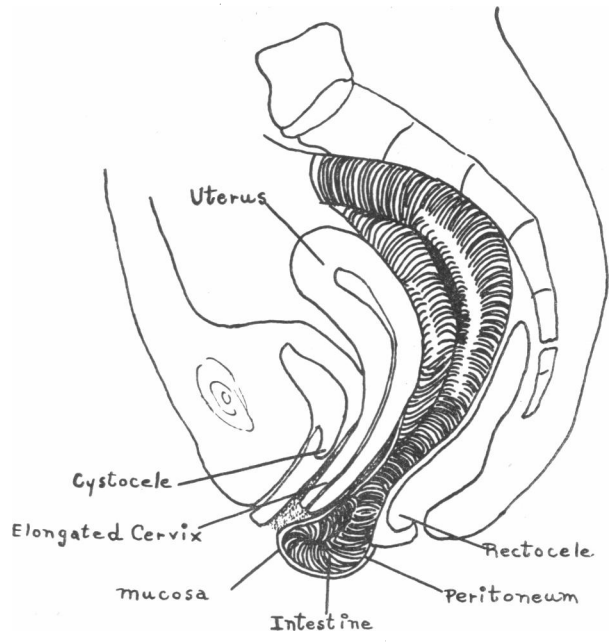


Fig. 2.—Sagittal section, showing relation of the posterior vaginal hernia to the pelvic organs

*Physical Examination.*—Patient was a well-developed and nourished adult female of about forty years of age, who appeared to be in good health. The general examination was negative except for the pelvic findings, which were as follows: A second-degree laceration of the perineum; a moderate cystocele; an elongated hypertrophic cervix about three and one-half inches in length which, on straining, failed to descend to any extent; and a mass the size of a small orange arising from the posterior vaginal vault directly behind the cervix in the mid-line, and which partially extruded at the vaginal orifice (Figs. 1 and 2). This mass was soft and yielding and could be reduced, but recurred on having the patient strain or stand. On having the patient cough, a definite impulse was felt, and on one occasion a slight gurgling was heard on reduction of the hernia. Digital rectal examination revealed the small rectocele, but the examining finger failed to enter the protruding mass. The uterus was anteflexed, of normal size and moveable. The adnexal regions were negative. A diagnosis of posterior vaginal hernia, cystocele, rectocele, and elongated hypertrophic cervix was made.

*Operation.*—On November 23, 1936, the patient was operated upon under avertin and ether anesthesia. The usual incision and dissection were made, as for a perineorrhaphy. On encountering the peritoneal sac toward the upper limits of the incision, the incision was extended, and the peritoneal sac isolated to its base in the median line in the posterior vaginal vault (Fig. 3). The sac was opened, and after reducing its contents it was transfixed and ligated at its base, the sac amputated and the stump sutured into the posterior wall of the uterus (Fig. 4). The surrounding fascia was then included in a purse-string suture, and this part of the operation completed as a high perineorrhaphy. A high amputation of the cervix was then carried out, followed by repair of the cystocele. An uneventful convalescence followed, and on examination two months post-

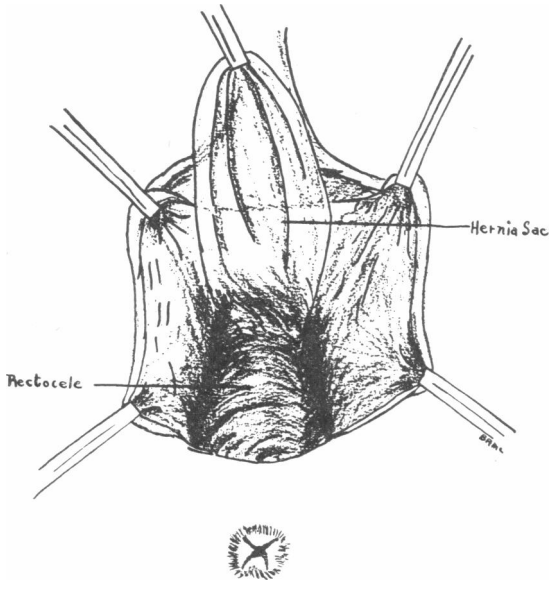


Fig. 3.—Hernial sac isolated to its base

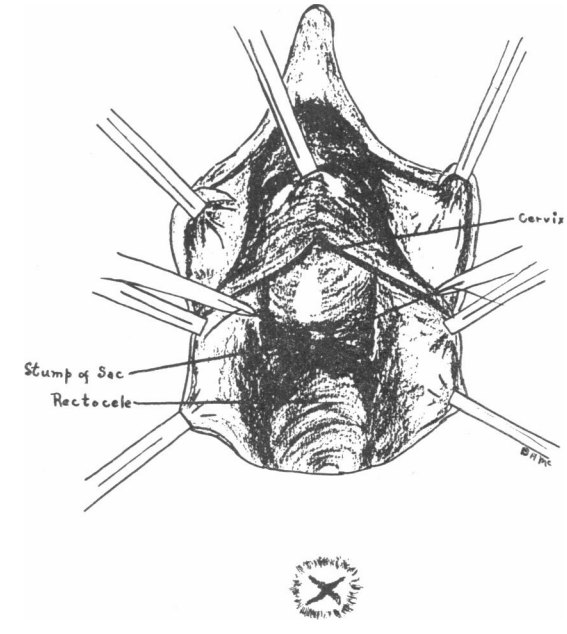


Fig. 4.—Ligated stump of sac which has been sutured into the posterior wall of uterus

operative a firm perineum was found with no tendency toward recurrence.

## ETIOLOGY

In common with other herniae this type possesses the possibility of being either congenital or acquired. In the above reported case there can be no question but that the hard labors, with their accompanying trauma, were at least the predisposing factors in the development of the hernia. That trauma incident to childbirth is important, is shown by the fact that in forty-two cases Bueermann[3] found that 90.4 per cent had borne children, and only four were nulliparas.

Zuckerkandl[13] and others have shown that in the fetus the cul-de-sac extends to the levator ani muscles and that its depth decreases until puberty, when it reaches the level of the second or third sacral vertebra. Daniel Jones[6] has described the congenital and acquired types of deep cul-de-sac. He considers the congenital type rare, and it is this type that would naturally predispose to the development of a hernia during childbirth or some other unusual strain.

## DIAGNOSIS

As a rule the symptoms of a posterior vaginal hernia are those of a rectocele, and on examination when an apparent high rectocele is found it is well to consider the possibility of a hernia. This is especially so if the patient has had one or more pregnancies, or has been operated upon previously for a rectocele with a resultant recurrence.

This type of hernia originates in the posterior vaginal vault in the mid-line; and as the internal ring of the hernia is large, the mass may largely reduce itself when the patient assumes the lithotomy position, but will recur on having the patient strain, cough or stand in the erect posture. Coughing will cause a definite impulse, particularly if the hernia has been reduced, and gurgling may frequently be heard on reducing the mass. Bueermann[3] has described a sign pathognomonic of small intestinal contents in the sac, *i. e.*, the sac is digitally irritated, and peristaltic waves may be seen to course over the surface of the sac.

In questionable cases a rectal examination always proves to be a reliable method of differential diagnosis. The finger will enter a rectocele protrusion, but not the main portion of a hernial mass. However, with a large rectocele, if a positive diagnosis is not made preoperatively, the vaginal wall should be dissected high up and search made for a sac.

Inclusion cysts, Gärtner's duct cysts, and tumors of the vagina are usually easily differentiated from posterior vaginal herniae.

## TREATMENT

The treatment of posterior vaginal hernia is surgical and, as pointed out by Masson,[7,8] the essential principles governing the treatment of hernia in general must be followed. These principles are "isolation of the sac, disposal of the sac, and repair of the defect at the point of egress of the hernia from the abdomen."

No uniform surgical procedure has been adopted, as most patients with posterior vaginal hernia have had one or more pregnancies, and associated malpositions of the pelvic organs may be encountered which also require surgical correction. If laparotomy is not contemplated, the hernia can usually be repaired successfully by the vaginal route as outlined in the case report. Rather than suturing the stump of the sac to the posterior wall of the uterus, as was done in this case after Black's[2] method, Ward[11,12] has used the technique of uniting the uterosacral ligaments as close to the rectum as possible after disposing of the sac.

If the combined vaginal and abdominal type of operation is to be done, Masson[7,8] reduces the hernia, inverts the sac into the abdomen and then repairs the perineum. On opening the abdomen, the completely inverted sac is sutured to the posterior wall of the uterus, and a series of purse-string sutures is inserted between the sigmoid and the posterior wall of the uterus, thus obliterating the cul-de-sac. Masson[7] also mentions the method, which would be adaptable to some cases, of opening the peritoneum in front of the uterus after the sac is inverted and drawing the uterus and sac through the opening and suturing them together, or excising the excess tissue of the sac and closing the opening with a purse-string suture.

If abdominal exploration is advisable preliminary to the vaginal operation, the neck of the sac is closed by purse-string suture, the cul-de-sac is obliterated, and the vaginal operation completed immediately, or at a later date before the patient is allowed out of bed.

Uterine prolapse is often associated with a large bulging cul-de-sac, which is termed "vaginal enterocele" by Miles,[9] and "posterior vaginal" hernia by others. This can be successfully repaired by the vaginal route at the same time that the vaginal hysterectomy is done.

## IN CONCLUSION

It may be pointed out that the important feature in this type of case is the necessity for a careful differential diagnosis between a simple rectocele and a posterior vaginal hernia which usually, although not invariably, is complicated by a rectocele.

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Mission Inn Rotunda.

## DISCUSSION

WILLIAM P. KROGER, M. D. (1930 Wilshire Boulevard, Los Angeles).—The fact that a true posterior vaginal hernia is unique probably accounts for its being so fre-

quently confused with a high rectocele. Unless the hernia is pronounced or shows a definite sac containing the bowel, an enterocele, a preoperative diagnosis is difficult.

If the condition remains unrecognized during a perineorrhaphy, the operative result will be disappointing.

In two of the three cases that have come to our attention, a previous perineorrhaphy had been done. In our last case there was an associated uterine prolapse which required a vaginal hysterectomy. Apparently the constant traction of the contents of the hernia tended to drag the uterus with it, and was a factor in producing the prolapse. The action was similar to a sliding inguinal hernia, where the colon is pulled into the canal.

Doctor McCarty's operative technique seems to be universally employed. The detail of attaching the stump of the sac to the posterior surface of the uterus seems of value, and we shall employ it in our future cases. The results from this type of operation seem to be good, and rarely is it necessary to go into the abdomen from above.

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BON O. ADAMS, M. D. (Mission Inn Rotunda, Riverside).—The study of posterior vaginal hernia, which Doctor McCarty has presented, is a very important one, both to the patient and to the careful diagnostician. I, myself, failed to recognize the true condition in the case which the doctor reports—indeed, I had repaired the "rectocele" in this case, some nine years ago, and failed to recognize the true posterior vaginal hernia which was probably present at that time. I considered this case a recurrence of the "rectocele" which I had operated, until Doctor McCarty was able to demonstrate to me at operation the presence of a hernial sac and its contents. The contents were reduced, the sac amputated, and the stump anchored to the posterior uterine wall.

The point of differential diagnosis which should be emphasized is that the finger in the rectum will curve into the rectocele and demonstrate only a two-wall septum; *i. e.*, the anterior rectal wall and the posterior vaginal wall, whereas, if a hernia complicates the rectocele, the interbimanual mass is thicker, and can be felt to impulse on coughing and to gas-gurgle upon bimanual manipulation for reduction of the hernia. The technique of repair has been well described in the paper, and need not be amplified.

We are indebted to Doctor McCarty for his lucid presentation of this important paper upon a condition, the diagnosis of which I am sure I must have missed more than once, and I dare say many others have overlooked at times.

❦

HALL G. HOLDER, M. D. (233 A Street, San Diego).—I have never seen a true posterior vaginal hernia such as Doctor McCarty describes.

My interest in this subject is in vaginal enterocele. This condition is present in vaginal prolapse in a far larger per cent of cases than is generally recognized, and undoubtedly accounts for many of the poor results in the operative treatment of this condition. It is important, therefore, in the surgical treatment of vaginal prolapse to properly diagnose vaginal enterocele, and it is further necessary that some definite surgical procedure be in mind for its correction in addition to total vaginal hysterectomy. The differential diagnosis may be easily made as so clearly brought out by Doctor McCarty following rectal examination. In cases of vaginal prolapse it has been my practice to employ the Mayo technique of plication of the broad ligaments after total vaginal hysterectomy under the symphysis as a basis for the cure of the cystocele. This procedure has been very satisfactory, as far as it goes, but in addition the treatment of the vaginal enterocele, which is almost always present, should be taken into consideration.

It is very simple at the time of hysterectomy to dissect out the peritoneal pouch of the enterocele herniating through the cul-de-sac of the Douglas up to the uterosacral ligaments. The sac is then ligated, amputated and the uterosacral ligament tied with interrupted silk sutures as close to the rectum as possible. The vaginal incision is then closed in the usual manner and high perineorrhaphy completes the operation. I believe Doctor McCarty's paper is timely in emphasizing the importance of diagnosis and proper surgical treatment of a condition which is frequently overlooked, and which is probably the prime factor in poor results, and recurrence of herniation and prolapse in these cases.

## MENTAL HYGIENE VIEWPOINTS ON SOME COMMON PEDIATRIC PROBLEMS*

*By* FORREST N. ANDERSON, M.D.
*Los Angeles*

DISCUSSION *by George B. Kryder, M. D., Glendale; E. Earl Moody, M. D., Los Angeles; Ernst Wolff, M. D., San Francisco.*

AT the outset of this discussion I shall try to define my position. Under the general heading of psychiatry there are two rather widely different concepts. Unless we understand by the context which of the concepts is meant, we are left in confusion. I refer, first, to the concept of psychiatry as a definite technique—in a rough way approximating the techniques of surgery, obstetrics, or any other medical specialty. To try to disarm your criticism, I admit immediately that my specialty is less tangible in its techniques than are these others, but I am going to assume your agreement to the general idea that psychiatry does have a technique.

The other concept of psychiatry is in its attitude sense, such as may be implied in the expression, "He has a good psychiatric viewpoint." It is this concept upon which I am dwelling today. It is the meaning and value of psychiatry that is worth while to other physicians, and more especially to pediatricians. It is a something that is not, by any means, the sole possession of the psychiatrist; nor is it his contribution alone to medical and educational approach and philosophy. As I see it, the psychiatrist is entitled to call this his province and his contribution mainly because he has made of it an object of thoughtful and prolonged consideration. He has, in a sense, endeavored to codify and extend the principles, all the while admitting the integral contribution of the pediatrician, the physiologist, the educator, the social worker, and others. I trust I make clear my meaning.

### ATTITUDE OF MENTAL HYGIENE PSYCHIATRY

Now what is this attitude of mental hygiene psychiatry, and on what is it founded? We have evolved in our philosophy to the place that we realize that, to most questions, we do not have specific answers. We have learned that neither medicine nor any other technique can, except in a relatively few instances, materially alter the phenomena of life. We have learned that man as a time-space binding organism is a temporary focalization of forces almost cosmic in intensity, and that what we mainly may do is to ascertain principles and methods of these forces in action. Then, perhaps, we may push our patient just a little more in line with the main channel of these processes. In other words, we study not to alter nature, but to know, and put ourselves in harmony with her.

We have come to realize that the child is not separable into components of body, emotion, and intellect. These are still helpful pigeonholings, so long as we always bear in mind that what we are dealing with is not a divisible organism but a unit-functioning one. As cases passing by us and

* Read before the Pediatric Section of the California Medical Association at the sixty-sixth annual session, Del Monte, May 2–6, 1937.